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TI Effect of grinding on the reactivity of fly ash  
AU Carles-Gibergues, A.; Vaquier, A.  
CS Lab. Gen. Civil, INSA, Fr.  
SO Ciments, Betons, Plâtres, Chaux (1985), 752, 46-50  
CODEN: CBPCDD; ISSN: 0397-006X  
DT Journal  
LA French  
CC 58-2 (Cement, Concrete, and Related Building Materials)  
AB The effect of grinding on the pozzolanic reactivity of fly  
ash was studied. The chemical and mineralogical composition, morphol.,  
granulometry, sp. surface, porosity, and solubility in pure  
water and in water saturated with  $\text{Ca(OH)}_2$  were investigated. The  
results indicated that the increase in strength of concrete containing the  
fly ash is not, or not entirely, due to the increased  
solubility of the fly ash. The initial rapid release of  
ettringite-forming sulfates and solubilization of  $\text{SiO}_2$  in the glass are  
not increased by grinding of the ash. The grinding results, at the same  
water/solid ratio, in more fluid pastes. The water requirement is thus  
decreased, resulting in decreased porosity of the set concrete and thus an  
improved mech. strength.  
ST grinding fly ash pozzolanic reactivity  
IT Concrete  
(strength of, fly ash grinding in relation to)  
IT Ashes (residues)  
(fly, grinding of, pozzolanic reactivity and concrete strength in  
relation to)  
IT Size reduction  
(grinding, of fly ash, pozzolanic reactivity)